



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,489	02/17/2004	Victor W. Logan	GP-303714	1549

7590 10/18/2007  
CARY W. BROOKS  
General Motors Corporation  
Legal Staff, Mail Code 482-C23-B21  
P.O. Box 300  
Detroit, MI 48265-3000

EXAMINER
----------

MERCADO, JULIAN A

ART UNIT	PAPER NUMBER
----------	--------------

1795

MAIL DATE	DELIVERY MODE
-----------	---------------

10/18/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/780,489	<b>Applicant(s)</b> LOGAN, VICTOR W.	
	<b>Examiner</b> Julian Mercado	<b>Art Unit</b> 1795	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 July 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 1795

## **DETAILED ACTION**

### ***Remarks***

This Office action is responsive to applicant's amendment filed on July 27, 2007.

Claims 1-29 are pending. This Office action is made NON-FINAL in view of a new ground of rejection.

### ***Claim Objections***

The objection to claims 6, 8 and 9 has been withdrawn.

### ***Claim Rejections - 35 USC § 112***

The rejection of claim 29 under 35 U.S.C. 112, second paragraph has been withdrawn.

(new rejection)

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 27, 28 and 29 (all independent claims) all recite in the preamble "said fuel cell comprising:". To this end, it is unclear how a "condition monitor" and "vent valve controller" further limit a fuel cell, as these features are more properly limiting towards a fuel cell system

Art Unit: 1795

and not a fuel cell *per se*. For purposes of claim interpretation, the limitations drawn to a condition monitor and vent valve controller have not been given patentable weight, as these features fail to further limit or give patentable scope to a fuel cell.

Claim 20 in lines 1-2 similarly recites that the fuel cell further comprises a data store. For similar reasons as set forth above, this limitation is unclear and has not been given patentable weight as it fails to further limit or give patentable scope to the claimed fuel cell.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1-25 and 27-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Mizumoto et al. (U.S. Pat. 4,904,547).

This rejection is maintained for the reasons of record. It is noted that claims 20-23 are now included in this ground of rejection. For the reasons set forth under 35 U.S.C. 112, second paragraph (discussion above), a fuel cell comprising a data store is not deemed to require any patentable weight.

Applicant's arguments filed with the present amendment have been fully considered, however they are not found persuasive. Applicant's arguments appear to be premised on a controller being properly claimed. However, this Office action raises a 35 U.S.C. 112, second paragraph rejection to the claimed controller. While the examiner concedes with the assertion

Art Unit: 1795

that the claimed controller and its associated functions, if properly recited in the claim, is not taught or suggested by Mizumoto et al., applicant's arguments are not found persuasive as they are outside the scope of the present claims.

***Claim Rejections - 35 USC § 103***

The rejection of claims 20-23 under 35 U.S.C. 103(a) based on Mizumoto et al. (U.S. Pat. 4,904,547) and Dipierno Bosco et al. (U.S. Pat. 6,103,409) is deemed moot. For the reasons set forth under 35 U.S.C. 112, second paragraph (discussion above), a fuel cell comprising a data store has not been given patentable weight; the prior rejection based on Mizumoto et al. and Dipierno Bosco et al. is deemed moot insofar as the latter reference is not needed at this time to read on the scope of claim protection sought.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mizumoto et al. (U.S. Pat. 4,904,547) in view of Takada et al. (U.S. Pat. 5,460,896).

This rejection is maintained for the reasons of record. It is noted that arguments submitted for Takada et al. merely assert that this reference fails to remedy alleged differences of Mizumoto et al. from the present claims.

Art Unit: 1795

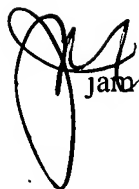
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian Mercado whose telephone number is (571) 272-1289. The examiner can normally be reached on Monday through Friday.

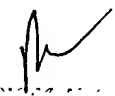
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan, can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



jam



PATRICK J. RYAN  
SUPERVISOR, PATENT EXAMINER